

Cessna 180, 182 and Wren 460 Series Aeroplanes

AIRWORTHINESS DIRECTIVE

For the reasons set out in the background section, the CASA delegate whose signature appears below revokes Airworthiness Directive (AD) AD/CESSNA 180/78 Amdt 1 under subregulation 39.1 (1) of CAR 1998. The AD requires that the action set out in the requirement section (being action that the delegate considers necessary to correct the unsafe condition) be taken in relation to the aircraft or aeronautical product mentioned in the applicability section: (a) in the circumstances mentioned in the requirement section; and (b) in accordance with the instructions set out in the requirement section; and (c) at the time mentioned in the compliance section.

**AD/CESSNA 180/78
Amdt 2**

Exhaust System - Inspection

7/2000

Applicability: Model 182S aeroplanes serial numbers 18280001 through 18280286 not incorporating improved design engine exhaust mufflers P/N 1254017-19 or P/N 9954200-9.

Requirement:

1. Carry out an inspection of exhaust system for cracking of the muffler end plates in accordance with procedures in Cessna Single Engine Service Bulletin SB98-78-02 Revision 1.
2. Replace engine exhaust mufflers with one of improved design, P/N 1254017-19 or P/N 9954200-9, in accordance with Cessna SB 98-78-03 dated December 14, 1998.

Note 1: Replacement with improved design muffler P/N 1254017-19 or P/N 9954200-9 provides terminating action for the requirements of this Directive.

3. Fabricate and install on the instrument panel in the cockpit, in clear view of the pilot in command, a placard that specifies inspection, before further flight, of all exhaust system muffler end plates following the occasion of an engine backfire upon start up. The placard should utilise letters of at least 3 millimetres in height and contain the following words: "If the engine backfires upon start-up, prior to further flight, inspect and replace (as necessary) all engine exhaust muffler end plates in accordance with AD/CESSNA 180/78 Amdt 2".

Note 2: FAA AD 2000-02-14 Amdt 39-11532 refers and supersedes FAA AD 98-13-10 Amdt 39-10598.

Compliance:

1. Unless previously accomplished; within 25 hours time-in-service (TIS) of the effective date of this Directive and thereafter at intervals not to exceed 25 hours TIS and, prior to flight following a reported engine backfire on engine start up.
2. Unless previously accomplished, prior to further flight if replacement is due to end plate cracking or within 12 calendar months time in service after the effective date of this directive. Remove placard from the instrument panel upon fitment of improved design muffler.
3. Within 5 days time in service after 13 July 2000.

This Amendment becomes effective on 13 July 2000.

Background: This directive was originally issued to address reports of cracks found in the engine exhaust muffler end plates of several Cessna Model 182S aircraft. The FAA determined that immediate AD action should be taken to detect and correct damage to the engine exhaust mufflers which could result in exhaust gases entering the aircraft with consequent crew and passenger injury.

Amendment 2 issued to provide terminating action for the muffler inspection and to remove the placard from the instrument panel on fitment of the improved muffler design.

Amendment 1 was issued to limit applicability to certain aeroplanes by serial number which have not yet been fitted with improved mufflers and to reflect the manufacturer's revision of the requirement document.

Amendment 1 of this Airworthiness Directive became effective on 22 April 1999.

The original issue of this Airworthiness Directive became effective on 10 September 1998.



Eugene Paul Holzapfel
Delegate of the Civil Aviation Safety Authority

30 May 2000